

REMARKS

This is in response to the Official Action currently outstanding with respect to the above-identified application.

By the foregoing Amendment, Claim 3 has been canceled, without prejudice; Claims 1, 2, 4, 6 and 7 have been amended; and no New Claims have been added. Accordingly, upon the entry of the foregoing Amendment, Claims 1, 2 and 4-12 as hereinabove amended will constitute the claims under active prosecution in the above-identified application.

As required by the Rules, the foregoing Amendment states the current status of all of the claims filed in this application, and also shows the particulars of the present amendments to Claims 1, 4, 6 and 7.

In particular, in the currently outstanding Official Action, the Examiner has:

1. Acknowledged Applicant's claim for foreign priority under 35 USC 119(a)-(d) or (f), and confirmed the receipt by the United States Patent and Trademark Office of the required certified copy of the priority document.
2. Indicated that the drawings as originally filed are accepted.
3. Provided Applicant with a Notice of References Cited (Form PTO-892) and a copy of each of the references listed therein.

4. Provided Applicants with a Notice of References Cited (Form PTO-892) and copies of each of the references cited therein.
5. Rejected Claims 1, 5 and 10 under 35 USC 102(b) as being anticipated by the Fukunaga et al reference (US Patent No. 5,706,064).
6. Rejected Claims 2-4 and 6 under 35 USC 103(a) as being unpatentable over the Fukunaga, et al reference in view of the Akiyama, et al. reference (US Patent No. 5,986,724)
7. Rejected Claims 7-9 and 12 under 35 USC 103(a) as being unpatentable over Fukunaga, et al reference in view of the Akiyama, et al. reference (US Patent No. 5,986,724) and further in view of the Satoshi, et al. reference (JP 2000-174012).
8. Made of record as pertinent to Applicants' disclosure the remaining art cited in Applicants' Information Disclosure Statement, but failed to rely upon any of that art in rejecting any of the pending claims.

No further comment regarding items 1-4 and 8 is deemed to be required in these Remarks.

With respect to items 5-7, Applicants respectfully calls the Examiner's attention to the foregoing Amendment wherein Claim 3 has been canceled, without prejudice, and Claims 1, 2, 4, 6 and 7 have been amended. Specifically, independent Claims 1 and 6 now include the limitations of canceled Claim 3, and an inadvertent error in Claim 2 as originally filed has been corrected. Accordingly, all of the claims of this application now contain limitations to the effect that the pixel electrodes are formed on the substrate prior to the forming of constituent parts the electrode wiring lines or the active elements.

The Examiner specifically admits that the Fukunaga et al reference fails to teach, disclose or suggest that the pixel electrodes are formed prior to the electrode wiring lines and the active elements.

Accordingly, Applicants respectfully submit that the foregoing amendment removes the basis for the Examiner's outstanding rejections under 35 USC 102(b) thereby rendering those rejections moot. A decision so holding in response to this communication is respectfully requested.

With respect to the Examiner's rejections under 35 USC 103(a), it is well established that in order to establish a *prima facie* case of obviousness, the Examiner is required to show some suggestion or motive in the art to combine or modify the teachings of the references in the manner that he postulates. Further, there must be a reasonable expectation that the combination or modification of the prior art postulated by the Examiner will be successful. Still further, all of the limitations of the claims under consideration and the reasonable expectation of success must be found within the four corners of the prior art (see, for example, *In re Vaeck*, 947 F2d 488, 2 USPQ2d 1438 (Fed. Cir. 1991)).

As noted, the Examiner admits that the Fukunaga, et al reference is insufficient to show that the pixel electrodes are to be formed on the insulating substrate prior to the formation of any of the constituent elements of either the electrode wiring lines or of the active elements. To fill this gap, the Examiner relies upon the Akiyama, et al reference. Specifically, the Examiner asserts that the Akiyama, et al reference provides the required showing and suggestion that would make it obvious to one of ordinary skill in the art as of the time that the present invention was made to form the Fukunaga, et al pixel electrodes prior to any of the constituent parts of the electrode wiring lines and the active elements.

More particularly, the Examiner asserts that the Akiyama, et al reference discloses the formation of pixel electrodes on an insulating substrate in such a way that no electrode wiring lines or active elements (or any of their constituent parts) exist between the pixel electrodes and the substrate. According to the Examiner this, in addition to the teaching of the Akiyama, et al. reference that the ferro-electric thin film therein disclosed must be formed on the pixel electrode prior to the formation of the thin film transistor because the temperatures required for the ferro-electric thin film would damage a preformed transistor justifies the present rejection. The Examiner's rejection, however, is inapposite to the present issue.

The present claims require the pixel electrode to be formed on the insulating substrate prior to any of the constituent parts of the electrode wiring lines or the active elements. Reference to the next to the last paragraph of Column 28 of the Akiyama, et al reference clearly shows, however, that the pixel electrodes *and the gate electrodes 7 of the TFT* are formed on the substrate at the same time in the Akayama, et al reference. Akayama et al indicate that following the formation of the pixel electrodes and gate electrodes out of a heat resistant material, the ferro-electric thin film 1 is formed on the pixel electrodes by any one of a number of processes including sol-gel processes. Finally, as a last step, Akayama et al forms the thin film transistors 3. In the above regards, it is to be noted that the Akiyama et al reference indicates that the pixel/ferro-electric film combination has to be completed prior to the formation of the transistor because the temperature of ferro-electric film formation would damage the transistors. Consequently, it will be understood that the Akayama, et al. reference *does not* teach, disclose or suggest that the nature of the pixel (which Fukunaga, et al indicates might be formed using sol-gel methodology) requires the formation of the pixels on the insulating substrate *alone* prior to the formation of the other claimed elements.

Accordingly, the references cited by the Examiner fail, both when taken individually and when taken in combination) to teach, disclose or suggest all of the limitations of the claims of this application as hereinabove amended. More specifically, Applicants respectfully submit that the fact that the references allude to a sol-gel procedure in the formation of the pixel of Fukunaga et al or the ferro-electric layer of Akiyama et al in and of itself is insufficient to render the present invention unpatentable under 35 USC 103(a). Similarly, the Akiyama et al indication that the pixels **and** the gate electrodes should be formed on the insulating substrate first teaches away from the present invention's concept that the pixels alone should be formed first on the insulating substrate. Consequently, Applicants respectfully submit that the Examiner's present rejections do not follow from an analysis of the references alone, but rather can only be justified via a dependence upon the hindsight knowledge of Applicants disclosure, i.e., by combining isolated elements of the cited art in a manner that allegedly results in the present invention. Applicants respectfully submit that this form of claim analysis is improper.

Accordingly, Applicants respectfully submit that the Examiner has failed to establish a *prima facie* case in support of his rejection of claims of this application (at least as they are amended hereinabove) under 35 USC 103(a). Consequently, a decision so holding and withdrawing the currently outstanding rejections under 35 USC 103(a) in response to this communication is respectfully requested.

For each and all of the foregoing reason and in light of the foregoing amendment, Applicant respectfully submits that Claims 1, 2 and 4 - 7 are now in condition for allowance. Therefore, reconsideration of this application and the allowance thereof with all of the presently pending claims in response to this communication are respectfully requested.

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Applicant believes that no further fees are due in connection with this submission. However, if for any reason a further fee is required, a fee paid is inadequate or credit is owed for any excess fee paid, you are hereby authorized and requested to charge or credit Deposit Account No. **04-1105** as necessary.

Respectfully submitted,

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SIGNATURE OF PRACTITIONER

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